

I claim:

1. An improved refractory system of the type having a refractory material attached to a wall by anchoring studs wherein the improvement comprises at least some of the anchoring studs comprised of a cylindrical body having a top, a bottom and a side wall extending from the top to the bottom, the side wall having a plurality of grooves extending from the top toward the bottom and refractory material being in at least some of the grooves.

2. The improved refractory system of claim 1 wherein at least some of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

3. The improved refractory system of claim 1 wherein at least some of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

4. The improved refractory system of claim 1 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

5. The improved refractory system of claim 1 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

6. The improved refractory system of claim 1 wherein the grooves form a knurled pattern.

7. The improved refractory system of claim 1 wherein the studs are low carbon steel.

8. The improved refractory system of claim 1 also comprising a corrosion resistant or erosion resistant coating applied to at least a portion of the body of each stud.

9. The improved refractory system of claim 1 wherein at least some of the studs have a cross-sectional shape selected from the group consisting of a circle, an oval and a polygon.

10. The improved refractory system of claim 1 wherein the refractory material is cement or a ceramic.

11. The improved refractory system of claim 1 wherein the side wall of the stud has a smooth surface adjacent the bottom and the plurality of grooves extend from the top to the smooth surface.

12. The improved refractory system of claim 1 also comprising a plurality of spikes on the top of the stud.

13. An improved insulated wall of the type having an insulating material attached to a wall by anchoring studs wherein the improvement comprises at least some of the anchoring studs comprised of a cylindrical body having a top, a bottom and a side wall extending from the top toward the bottom, the side wall having a plurality of grooves, at least some of the grooves extending from the top to the bottom of the cylindrical body and the insulating material being in at least some of the grooves.

14. The improved insulated wall of claim 13 wherein at least some of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

15. The improved insulated wall of claim 13 wherein at least some of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

16. The improved insulated wall of claim 13 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

17. The improved insulated wall of claim 13 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

18. The improved insulated wall of claim 13 wherein the grooves form a knurled pattern.

19. The improved insulated wall of claim 13 wherein the studs are low carbon steel.
20. The improved insulated wall of claim 13 also comprising a corrosion resistant or erosion resistant coating applied to at least a portion of the body of each stud.
21. The improved insulated wall of claim 13 wherein at least some of the studs have a cross-sectional shape selected from the group consisting of a circle, an oval and a polygon.
22. The improved refractory system of claim 13 wherein the side wall of the stud has a smooth surface adjacent the bottom and the plurality of grooves extend from the top to the smooth surface.
23. The improved refractory system of claim 13 also comprising a plurality of spikes on the top of the stud.
24. A stud comprised of cylindrical body having a top, a bottom and a side wall extending from the top to the bottom, the side wall having a smooth portion adjacent the bottom and a plurality of grooves extending from the top to the smooth portion.

25. The stud of claim 24 wherein at least some of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

26. The stud of claim 24 wherein at least some of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

27. The stud of claim 24 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are parallel to a longitudinal centerline through the stud and parallel to one another.

28. The stud of claim 24 wherein some of the grooves are circumferential grooves parallel to one another and others of the grooves are diagonal to a longitudinal centerline through the stud and parallel to one another.

29. The stud of claim 24 wherein the grooves form a knurled pattern.

30. The stud of claim 24 wherein the body of the stud is a low carbon steel.

31. The stud of claim 24 also comprising a corrosion resistant or erosion resistant coating applied to at least a portion of the body of the stud.

32. The stud of claim 24 wherein at least some of the studs have a cross-sectional shape selected from the group consisting of a circle, an oval and a polygon.

33. The stud of claim 24 wherein the bottom of the stud is conical.

34. The stud of claim 24 also comprising a plurality of spikes on the top of the stud.